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### 900 Series

POWER A M P L I F I E R S : P - 9 0 6 M K 2 P - 9 1 2 M K 2 P - 9 2 4 M K 2

THE TOA 900 SERIES are widely recognized as the industry standard in installed sound system amplification. When reliability and performance are critical – such as in paging and music distribution for airport, hospital, and industrial sound systems – you can count on the TOA 900 Series to perform consistently, day-in and day-out.

The P-906MK2 (60 W), P-912MK2 (120 W) and P-924MK2 (240 W) **Single Channel Power Amplifiers** are engineered for high performance with wide frequency response, very low noise and distortion, and excellent output regulation. A single module slot allows you to easily configure custom configurations using TOA plug-in modules with an extensive array of features and connector types. Outputs include transformerisolated 25 V, 70 V and 8 ohm plus a direct low-impedance mode if non-transformer operation is required.

Other features include a direct input, selectable input sensitivity, low-cut switch and protection circuitry.

The 900 Series Power Amplifiers are UL and cUL Listed and carry a five year warranty.



### HIGHLIGHTS

- Modular Single Channel Power Amplifiers for paging, background/ foreground music distribution and music/messaging-on-hold.
- Proven TOA Quality and Reliability
- Engineered for High Performance with wide frequency response, very low noise and distortion, and excellent output regulation.
- Three Models: P-906MK2 (60 W), P-912MK2 (120 W), P-924MK2 (240 W)
- Input Module Slot accepts most TOA plug-in modules for custom system configurations.
- 25 V, 70 V and 8 Ohm Transformer-Isolated Speaker Outputs with screw terminal connector and protective cover plate.
- Direct Low-Impedance Output Mode bypasses output transformer.
- Direct Input for connecting an external mixer or other source.

- Selectable Input Sensitivity to accommodate high or low input levels.
- Master Volume Control
- Low Cut Switch to limit low frequency response.
- Normal, Clip, Power, Protect, and Signal Indicators provide unit status.
- Rear Panel AC Convenience Outlet for powering external equipment
- Turn-On Delay disconnects output during power-up.
- Over-current and Thermal Protection Circuitry prevents potential damage from overload, short-circuit, or overheating.
- Volume Control Security Knob Included
- Optional Rack-Mount Kits
- UL / cUL Listed
- Five Year Warranty

#### **OPTIONAL ACCESSORIES**

MB-25B	MB-25B Rack-mount Kit (2 RU): P-906MK2 / P-912MK2				
MB-35B	Rack-mount Kit (3 RU): P-924MK2				
PF-511	Perforated Rack Panel (2 RU)				
YA-920	Volume Control Security Knob				

### **SPECIFICATIONS**

Туре	Power amplifier						
Output Power	P-906MK2: 60 W RMS; P-912MK2: 120 W RMS P-924MK2: 240 W RMS						
Power Bandwidth	(D) 20 - 20k Hz, 0.5% THD; (T) 50 - 20k Hz, 0.5% THD						
Frequency Response	(D) 20 - 20k Hz, ±1 dB; (T) 20 - 15k Hz, ±1 dB (T) 20 - 20k Hz, +1 dB / -3 dB						
Total Harmonic Distortion	0.01% at 1k Hz, rated output						
Inputs	1 modular input port 1 direct input Use only one of direct input or modular input port.						
Input Sensitivity & Impedance	Input port: 100 mV or 1000 mV (switchable)/10k $\Omega$ Direct input: 100 mV or 1000 mV (switchable)/10k $\Omega$						
Outputs (T)=Transformer, (D)=Direct	Main (T): 8 $\Omega$ , 25 V & 70 V, balanced Main (D): 4 $\Omega$ , unbalanced						
Output Regulation	(D): Less than 0.5 dB, no load to full load (T): Less than 1.0 dB, no load to full load						
Dynamic Range (Band Pass: 20 - 20k Hz, with Tone Controls centered)	Input level switch in 0 dBV (1000 mV) position: 108 dB Input level switch in -20 dBV (100 mV) position: 90 dB						
Indicators	Normal, Peak, Power, Protect, and Signal LEDs						
Protection	<ul><li>P-906/912MK2: Self-protection, with internal AC fuse</li><li>P-924MK2: Self-protection, with 2 AC fuses (1 internal) and 2 DC fuses.</li></ul>						
Power Consumption	P-906MK2: 100 W; P-912MK2: 180 W; P-924MK2: 120V/3A						
Temperature Range	12° F to 140° F (-10° C to +60° C)						
Color	Black						
Dimensions (W x H x D)	<b>P-906/912MK2</b> : 16.5" x 3.9" x 14.1" (420 x 99.1 x 358 mm) <b>P-924MK2</b> : 16.5" x 6.0" x 13.2" (420 x 151.3 x 334.2 mm)						
Weight (without modules)	<b>P-906MK2</b> : 20.1 lbs (9.1 kg); <b>P-912MK2</b> : 24.0 lbs (10.9 kg) <b>P-924MK2</b> : 43.0 lbs (19.5 kg)						
Other Features	Output connects approx. 5 seconds after switching power on.						

#### Visit www.toacanada.com to download:

900 Series Architect and Engineering Specifications900 Series Installation Manual900 Series CAD Files900 Series Module Guide



#### **APPLICATIONS**

A/V Rentals Airports Audio/Visual Auditoriums / Theatres Banks Bars / Lounges / Nightclubs Boardrooms **Business Music Conference Facilities Convenience Stores Educational Facilities** Fitness Clubs / Gymnasiums Hotels / Hospitality Houses of Worship Industrial / Warehouses Museums Music Distribution Offices Public Address Restaurants **Retail Stores** Theme Parks **Training Rooms** 



## M O D U L E S E L E C T I O N



Model	Туре	Description			
M-01F	MIC	Microphone Input Module, Balanced, 200 $oldsymbol{\Omega}$ , Lo/Hi-Cut Filters, Female XLR			
M-01M	MIC	Same as M-O1F with Male XLR			
M-01P	MIC	Same as M-O1F with Phone Jack			
M-01S	MIC	Same as M-O1F with Screw Terminals			
M-03P	MIC	Microphone Input Module, HiZ, Unbalanced, 50k $oldsymbol{\Omega}$ , Lo/Hi-Cut Filters, Phone Jack			
M-21S	MIC	Microphone Input Module, Balanced, 200 $\Omega$ , Lo/Hi-Cut Filters, Remote Vol. Control, Screw Terminals			
M-51F	MIC	Microphone Input Module, Balanced, 200 $\Omega$ , Lo-Cut Filter, Voice Gate, Female XLR			
M-51S	MIC	Same as M-51F with Screw Terminals			
M-61F	MIC	Microphone Input Module, Balanced, 200 $\Omega$ , Lo/Hi-Cut Filters, Compressor, Female XLR			
M-61S	MIC	Same as M-61F with Screw Terminals			
B-01F	LINE	Balanced Line Input Module, 10k ${f \Omega}$ Transformer, Female XLR			
B-01S	LINE	Balanced Line Input Module, 10k ${f \Omega}$ Transformer, Screw Terminals			
B-21S	LINE	Balanced Line Input Module, 10k $\Omega$ Transformer, Remote Volume Control, Screw Terminals			
L-01F	LINE	Line Matching Input Module, 600 $\Omega$ Transformer, Balanced, Female XLR			
L-01S	LINE	Same as L-01F with Screw Terminals			
U-01F	LINE	Line Input Module, Unbalanced, 220k $\Omega$ , Female XLR			
U-01P	LINE	Same as U-01F with Phone Jack			
U-01R	LINE	Same as U-01F with RCA Jack			
U-01S	LINE	Same as U-01F with Screw Terminals			
U-03R	LINE	Stereo Line Input Module, Lo/Hi-Cut Filters, Stereo Summing Dual RCA Jacks			
U-03S	LINE	Line Input Module, Lo/Hi-Cut Filters, Screw Terminals			
U-21S	LINE	Line Input Module, Unbalanced, 220k $\Omega$ , Remote Volume Control, Screw Terminals			
U-61S	LINE	Line Input Module, Unbalanced, 220k $\Omega$ , Compressor, Screw Terminals			
E-03R	SPECIAL FUNCTION	900 Series Processor Module for F-121C/CM Speakers, Dual RCA Jacks			
E-04R	SPECIAL FUNCTION	900 Series Processor Module for H-1 Speakers, Dual RCA Jacks			
E-05R	SPECIAL FUNCTION	900 Series Processor Module for H-2/H-2WP Speakers, Dual RCA Jacks			
E-06R	SPECIAL FUNCTION	900 Series Processor Module for H-3/H-3WP Speakers, Dual RCA Jacks			
S-01S	SPECIAL FUNCTION	Signal Generator Module, 1 kHz Sine Wave, Screw Terminals			
S-02S	SPECIAL FUNCTION	Signal Generator Module, Buzzer/Yelp, Screw Terminals			
S-04S	SPECIAL FUNCTION	Signal Generator Module, 8 Selectable Tones, Screw Terminals			
T-02S	SPECIAL FUNCTION	Line Input Module for Music-on-Hold, Unbalanced, 220k $\Omega$ Input, 600 $\Omega$ Balanced Output, Screw Terminals			



TOA Canada Corporation Tel: 800-263-7639 Fax: 800-463-3569 www.toacanada.com

### 900 SERIES Power Amplifiers



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900 S	eries Module Chart	Female XLR	Male XLR	1/4" Phone Jack	RCA Jack	Dual RCA Jacks	3 Screw Terminals	5 Screw Terminals	Removable Terminal Block
Microphone nput Modules	Standard with high/low cut filters	M-01F	M-01M	M-01P			M-01S		
	Voice Gate with low cut filters	M-51F					M-51S		
	Compressor with high/low cut filters	M-61F					M-61S		
put	Remote Volume Control with high/low filters							M-21S	
	For high-Z mic. only w/ high/low cut filters			M-03P					
Line Input Modules*	Standard, no special features	L-01F B-01F U-01F		U-01P	U-01R		L-01S B-01S U-01S		
	Standard with high/low cut filters	U-UTF				U-03R	0-013		U-03S
	Remote Volume Control							B-21S U-21S	
	Compressor						U-61S		
	Line output						T-01S		
\$	Line input with Music-On-Hold (MOH) output							T-02S	
Special Function Modules	1 kHz Sine Wave test tone						S-01S		
	Buzzer/Yelp signal tone						S-02S		
	Switch-selectable tone						S-04S		
	Equalizer for F-121C/CM Speakers					E-03R			
	Equalizer for H-1 Speakers					E-04R			
	Equalizer for H-2/H-2WP Speakers					E-05R			
	Equalizer for H-3/H-3WP Speakers					E-06R			

\*For Line Input Modules: Use "B" modules w/ transformer isolation for balanced/unbalanced sources. Use "L" modules only for 600 ohm impedance matching. Use "U" for unbalanced sources w/ short cables ( $\leq$  15 feet).

